

B.S.-Chemistry Degree

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

First Year

Fall

Course	Prerequisite	Credit
CH 1134: Professional Development Seminar for Chemists		1
CH 1150: University Chemistry I		3
CH 1151: University Chemistry Lab I		1
CH 1153: University Chemistry I Recitation		1
MA 1160: Calculus with Technology I	MA 1032	4
PH 1100: Physics by Inquiry I		1
UN 1015: Composition		3
Essential Education: Activities for Well-being and Success		1
Total		15

Spring

Course	Prerequisite	Credit
CH 1160: University Chemistry II	CH 1150	3
CH 1161 University Chemistry Lab II	CH 1151	1
CH 1163 University Chemistry II Recitation		1
Essential Education: Foundations of the Human World		3
MA 2160: Calculus with Technology II	MA 1160	4
PH 1200: Physics by Inquiry II	PH 1100	1
PH 2100: University Physics I - Mechanics	MA 1160	3
Total		16

Second Year

Fall

Course	Prerequisite	Credit
Essential Education: Arts & Culture		3
CH 2430 Mechanistic Organic Chemistry	CH 1160	3
CH 2411 Organic Chemistry Lab I	CH 1161	1
MA 2321 Elementary Linear Algebra and MA 3521 Elementary Differential Equations* OR MA 3160 Multivariable Calculus with Technology	MA 1160 MA 2160	4
PH 2200 University Physics II – E & M	PH 2100	3
Essential Education: Activities for Well-being and Success		1
Total		15

Spring

Course	Prerequisite	Credit
CH 2440 Synthetic Organic Chemistry	CH 2430	3
CH 2421 Organic Chemistry Lab II	CH 2411	2
CH 2710 Computing in Chemistry	CH 1160	3
Essential Education: Intercultural Competency		3
MA 2321 Elementary Linear Algebra and MA 3521 Elementary Differential Equations* OR MA 3160 Multivariable Calculus with Technology	MA 1160 MA 2160	4
Essential Education: Activities for Well-being and Success		1
Total		16

Third Year

Fall

Course	Prerequisite	Credit
CH 3124: Communication for the Chemical Sciences	UN 1015	3
CH 3510: Physical Chemistry I	MA 2160 and PH 2200	3
CH 3511: Physical Chemistry 1 Lab	MA 2160 and PH 2200	2
CH 3310: Analytical Chemistry I	CH 1160	3
CH 3311: Analy. Chemistry I Lab	CH 1161	2
CH 4710: Biomolecular Chemistry	CH 2440	3
Total		16

Spring

Course	Prerequisite	Credit
CH 3520: Physical Chemistry II	CH 3510	3
CH 3521: Physical Chemistry Lab II	CH 3511	2
CH 3320: Analytical Chemistry II	CH 3310	3
CH 3321: Analytical Chemistry II Lab	CH 3311	2
Essential Education: Experience		3
Essential Education: SHAPE		3
Total		16

Fourth Year

Fall

Course	Prerequisite	Credit
CH 4310: Inorganic Chemistry	CH 3520	3
CH 4311: Inorganic Chemistry Lab	CH 3521	2
Major Approved Electives**		3
Free Electives		4
Total		12

Spring

Course	Prerequisite	Credit
Major Approved Electives**		3
Free Electives		11
Total		14

Grand Total = 120 Credits

* This is the accelerated version of Elementary Linear Algebra and Elementary Differential Equations. They can also be completed as full semester courses.

**Major Approved Electives must be selected from the approved Major Approved Electives list.